

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Idaho**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

Project **ID-SNF-105 / Dry Transfer and Storage Project (Privatized)**

Report Number: **GEN-01b**

Print Date: **3/10/2000**

HQ ID: **0448**

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## **General Project Information**

### **Project Description Narratives**

#### **Purpose, Scope, and Technical Approach:**

The purpose of the Dry Transfer and Storage Project is to provide an NRC-licensed Independent Spent Fuel Storage Installation (ISFSI) for interim dry storage of selected INEEL-assigned Spent Nuclear Fuel (SNF) (approximately 50 cubic meters). An October 17, 1995 Federal court-ordered agreement between the State of Idaho, DOE, and the Navy directs that all spent nuclear fuel will be out of wet storage by 2023 and shipped out of the State of Idaho by January 1, 2035. The Order additionally mandates an appropriation request for fiscal year 1998 for DOE to initiate procurement of dry storage at the Idaho National Engineering and Environmental Laboratory. The Order requires initiation of SNF loading into dry storage by July 1, 2003, and that a multi-purpose or equivalent dry storage system must be provided.

Specific work to be accomplished by ID-SNF-105 under a DOE-ID managed privatized contract includes:

1. Design, NRC License, construct, and operate a Dry Transfer Facility to allow dry transfer of SNF from a shipping cask to dry storage canisters. (Note: The private contractor will be the NRC licensee.)
2. Design, NRC License, construct, and operate an Independent Spent Fuel Storage Installation (ISFSI) for interim storage of SNF. (Note: The private contractor will be the NRC licensee.)
3. Design, fabrication, and loading of assigned SNF into canisters that meet the preliminary design specifications for standardized SNF canisters (i.e., repository disposal canisters)
4. Loading of designated fuel into the Independent Spent Fuel Storage Installation beginning by July 1, 2003 and completing in FY-2009. An incentive may be crafted to support the start of operation by July 1, 2003.

The SNF to be handled by this project includes SNF currently stored in existing INEEL storage facilities and off-site SNF assigned to the INEEL for interim storage.

These activities are in direct support of the State Settlement Agreement.

Technical Approach: The majority of fuel storage facilities at the INEEL do not have the capacity to perform this scope of work. Therefore, a privatized contract will be awarded for design, NRC licensing, construction, and operation of a dry transfer facility and SNF dry storage system. The NRC licensed project will allow for direct dry loading from shipping casks to interim dry storage following repackaging into standardized SNF canisters (RW). The spent nuclear fuel will be placed into storage that meets NRC regulations specified in 10 CFR Part 72, Licensing Requirements for Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste. Interim storage of fuel in dry storage meets the requirements of the Settlement Agreement between the State of Idaho, the Navy, and the Department of Energy. Funding allocation began in FY 1998 with capital reimbursements to the privatizing entity occurring from 2003 through 2009. Administration of the contract by DOE-ID and operation of the facility by the private contractor are covered in the INEEL Integrated SNF Program PBS, ID-SNF-102.

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## **Project Description Narratives**

### **Project Status in FY 2006:**

1. The dry transfer system and storage facility will have been constructed and NRC licensed.
2. All of the specified fuels will have been delivered to the privatized facility. Final transfer of SNF to the ISFSI will complete in FY 2009.

### **Post-2006 Project Scope:**

This PBS, ID-SNF-105, will end in 2009 although the privatized dry transfer system and storage facility will continue operation through 2035. The DOE will have the right to exercise an option on this privatization contract to transfer and store additional fuel after 2009.

### **Project End State**

This PBS, ID-SNF-105, will end in 2009 after construction and loading of the specified fuels into dry storage (Peach Bottom, Shippingport LWBR, and TRIGA).

An additional project may be required to put the balance of fuel assigned to the INEEL into dry storage.

The NRC regulations require a decontamination and decommissioning (D&D) plan for the facilities. The private contractor shall contribute to the preparation of this plan. D&D is planned for 2035. The Scope of Work for the private company does not include D&D of the facility.

### **Cost Baseline Comments:**

The privatized cost baseline is based on information from an independent cost estimate prepared by the Army Corps of Engineers in June, 1998. This estimate represents the best estimate of projected cost at this time because the DOE has not yet received bids from the vendors. The final budget cannot be determined until the fixed-price contract is awarded to the successful vendor (projected to be August, 1999).

### **Safety & Health Hazards:**

This PBS provides new facilities for NRC-licensed SNF interim storage -- replacing aging wet and below ground dry SNF storage facilities at the INEEL.

### **Safety & Health Work Performance:**

This PBS is for a privatized project that has not yet been awarded. The Request for Proposal has not been finalized, and direct safety and health and risk narratives can not be provided at this time. DOE S&H oversight is included in the contract administration costs covered by ID-SNF-102, Integrated SNF Program. However, because this is a privatization contract, the level of S&H oversight is still being evaluated and will not be finalized until a private contract is negotiated and awarded. Regulation of nuclear safety aspects will be the responsibility of the NRC. DOE must retain oversight for compliance with OSHA.

### **PBS Comments:**

This project is listed as an FY-98 Privatization Project. \$27 million has been approved for FY-1998 under the President's Budget. As additional \$60 million in outyear funding will be requested (\$30 million in FY 2000 and \$30 million in FY 2001).

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## Project Description Narratives

### Baseline Validation Narrative:

Although the privatization project has not been validated, the LICP, on which the privatization project is based upon, was validated via the murder board process in February 1996. A formal validation of the LICP was granted by a combined DOE-HQ and ID review group on June 18, 1996.

The LICP Conceptual Design was completed in June, 1996, which provided a more secure basis of estimate. The U.S. Army Corps of Engineers prepared an independent cost estimate for this workspace in June, 1998.

## General PBS Information

### Project Validated?

### Date Validated:

Has Headquarters reviewed and approved project?

No

Date Project was Added: 12/1/1997

Baseline Submission Date:

FEDPLAN Project? Yes

Drivers:	CERCLA	RCRA	DNFSB	AEA	UMTRCA	State	DOE Orders	Other
	N	N	N	N	N	Y	N	N

## Project Identification Information

DOE Project Manager: B. A. Beller

DOE Project Manager Phone Number: 208-526-0235

DOE Project Manager Fax Number: 208-526-9150

DOE Project Manager e-mail address: bellerba@inel.gov

Is this a High Visibility Project (Y/N): Y

## Planning Section

### Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006
PBS Baseline (current	120,000	0	120,000			27,000		20,000	5,000	68,000	0	0	0	0	0

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Site Summary Level: Idaho National Engineering and Environmental Laboratory

HQ ID: 0448

Project ID-SNF-105 / Dry Transfer and Storage Project (Privatized)

## Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006	
year dollars)																
PBS Baseline (constant 1999 dollars)	116,719	0	116,719			27,000		20,000	4,869	64,850	0	0	0	0	0	
PBS EM Baseline (current year dollars)	120,000	0	120,000			27,000		20,000	5,000	68,000	0	0	0	0	0	
PBS EM Baseline (constant 1999 dollars)	116,719	0	116,719			27,000		20,000	4,869	64,850	0	0	0	0	0	
	2007	2008	2009	2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (current year dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Baseline Escalation Rates

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	0.00%	0.00%	2.70%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070

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2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%

## Project Reconciliation

### Project Completion Date Changes:

Previously Projected End Date of Project: 9/30/2006

Current Projected End Date of Project: 4/1/2009

#### Explanation of Project Completion Date Difference (if applicable):

DOE-ID Programmatic Decision to extend project completion date by one year. All SNF will be delivered to the privatization facility by the end of FY-2006. The private vendor will have all of FY-2007 to complete operations.

### Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	83,139	Actual 1997 Cost:	Actual 1998 Cost:
Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	83,139	Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):	2,245
Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	85,384		

### Project Cost Changes

#### Cost Adjustments Reconciliation Narratives

Cost Change Due to Scope Deletions (-):

Cost Reductions Due to Efficiencies (-):

Cost Associated with New Scope (+):

Cost Growth Associated with Scope Previously Reported (+): 4,335 Funding profile provided this year is different than the profile provided last year.

Cost Reductions Due to Science & Technology Efficiencies (-):

Subtotal: 89,719

Additional Amount to Reconcile (+): 0 This is a privatization project. Budget will continue to be authorized but not spent until FY-2005.

Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 89,719

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## Project Reconciliation

### Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Award Privatization Contract	SNFPRIV-01		9/30/1999								
Submit NRC License Application	SNFPRIV-02		9/30/2000								
Begin Loading Fuels Into ISFSI	SNFPRIV-03		12/31/2004								
Complete Fuel Loading Into ISFSI	SNFPRIV-04		4/1/2009								
Project Start			10/1/1996								

### Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critical Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Award Privatization Contract	SNFPRIV-01										DOE-ID will award the contract for this Privatization Contract in FY 1999 (projected for September 1999)
Submit NRC License Application	SNFPRIV-02										The private vendor will complete design and submit the NRC License Application for this project by the end of FY 2000.
Begin Loading Fuels Into ISFSI	SNFPRIV-03										The October 17, 1995 Federal court-ordered agreement between the State of Idaho, DOE, and the Navy requires initiation of SNF loading into dry storage by July 1, 2003. The contractual start date for SNF loading on this project is December 31, 2004; howev
Complete Fuel Loading Into ISFSI	SNFPRIV-04					Y					End of project is April 1, 2009.
Project Start				Y							PBS Baseline Start

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